

Claims

1. A method for preparing a paper or paperboard core or tube comprising bonding together one or more plies of paper or paperboard material with a water-based adhesive and drying the adhesive with radio frequency.
2. The method of claim 1 wherein the core or tube is a single ply core or tube.
3. The method of claim 1 wherein the core or tube is a multi-ply core or tube.
4. The method of claim 1 wherein the core or tube is a consumer core or tube.
5. The method of claim 1 wherein the core or tube is an industrial core or tube.
6. The method of claim 1 wherein the core or tube is used in the tissue, towel, carpet, textile, plastic film, paper, food or industrial storage industry.
7. The method of claim 6 wherein the tube is a tubular container.
8. The method of claim 6 wherein the tubular container is a food container.
9. The method of claim 1 wherein the adhesive is applied to the ply material as the core or tube is wound, the wound core or tube is passed through a radio frequency field, and the core or tube is cut to a desired length.
10. The method of claim 5 wherein the tube is a concrete column forming tube.
11. The method of claim 10 wherein the concrete column forming tube comprises from about 10 to about 30 plies.

12. A paper or paperboard core or tube prepared by the method of claim 1.
13. The core or tube of claim 12 which is a multi-ply core or tube.
14. The tube of claim 13 which is a food container.
15. The tube of claim 13 which is a concrete column forming tube.
16. An apparatus for manufacturing a core or tube comprising a radio frequency unit.
17. The apparatus of claim 16 wherein the radio frequency unit is located adjacent to a cutting station.
18. The apparatus of claim 17 wherein the radio frequency unit is located before the cutting station.
19. The apparatus of claim 16 wherein the radio frequency unit has an emission frequency of from about 40.02 to 40.98 MHz.
20. The apparatus of claim 16 wherein plies of paper or paperboard are helically wound.